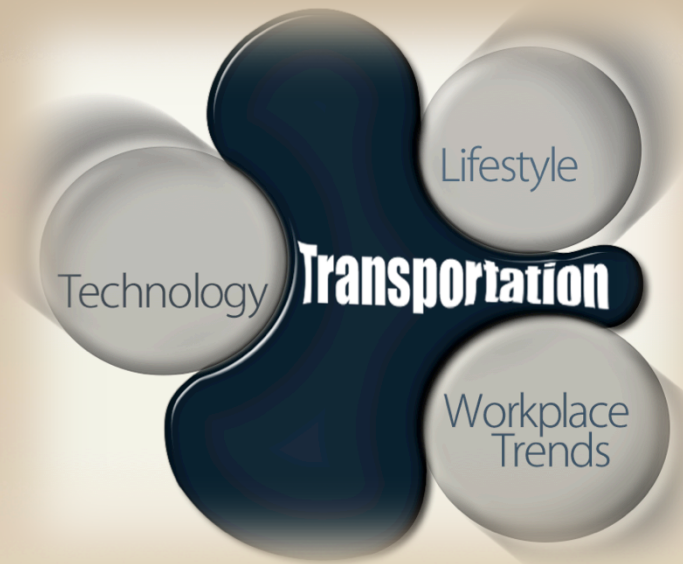# *New Mobility: The Next Transportation Frontier*

24th Annual Ahwahnee Conference for Elected Officials

Hasan Ikhrata, Executive Director
March 21, 2015

SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS
50 YEARS

Our Goals Today

- What are the recent **demographic trends** shaping our region/our state?

- How will **emerging technological innovations** coupled with changing demographics affect our future transportation choices?

- How can MPOs in partnership with local governments address these issues in their **Regional Transportation Plans / Sustainable Communities Strategies (RTP/SCS)**?

SCAG Region

- Nation's largest Metropolitan Planning Organization (MPO)
- 38,000 Square Miles
- 15 Subregions
- Nation's Global Gateway for Trade

191 Cities / 6 Counties

18.5 Million People
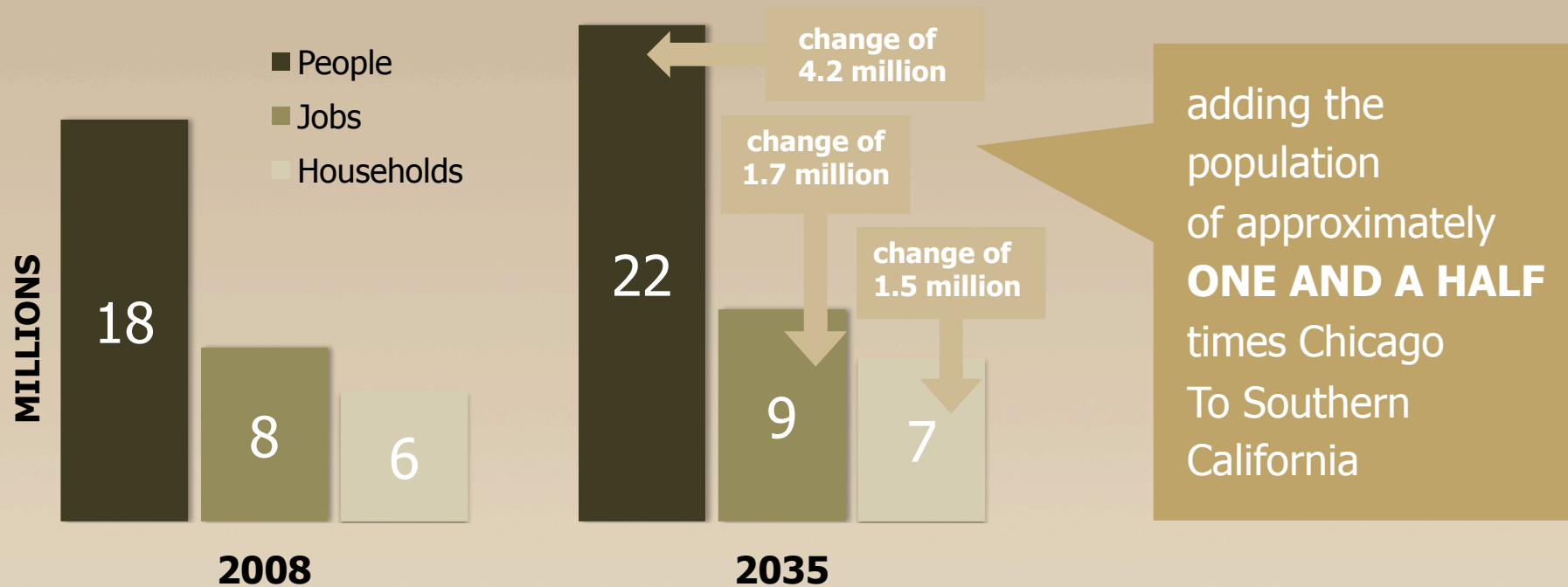
16th Largest Economy in the World

Regional Challenges
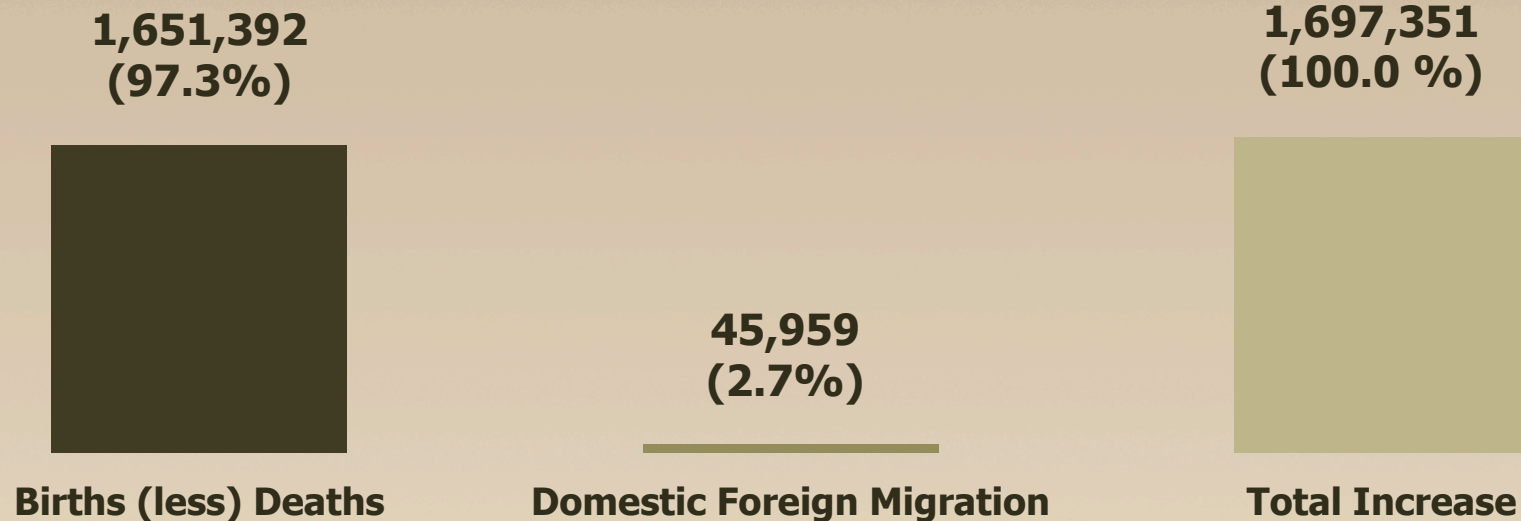
Major Demographic Trends

- Continued Low Population Growth
- Declining Number of Children
- Annual Flow of New Immigrants is Plunging
- Foreign Born Peaked or Declining
- Long Settled Foreign Born
- Rise of the Immigrant Second Generation
- Slower Racial and Ethnic Change
- A Soaring Senior Ratio
- The Homegrown (growth from native Californians) Revolution
- Rising Index of Children's Importance

Where is Population Growth Coming From?

Southern California Sources of Population Growth, 2000-2010

1,651,392
(97.3%)

1,697,351
(100.0 %)

45,959
(2.7%)

Births (less) Deaths   **Domestic Foreign Migration**   **Total Increase**
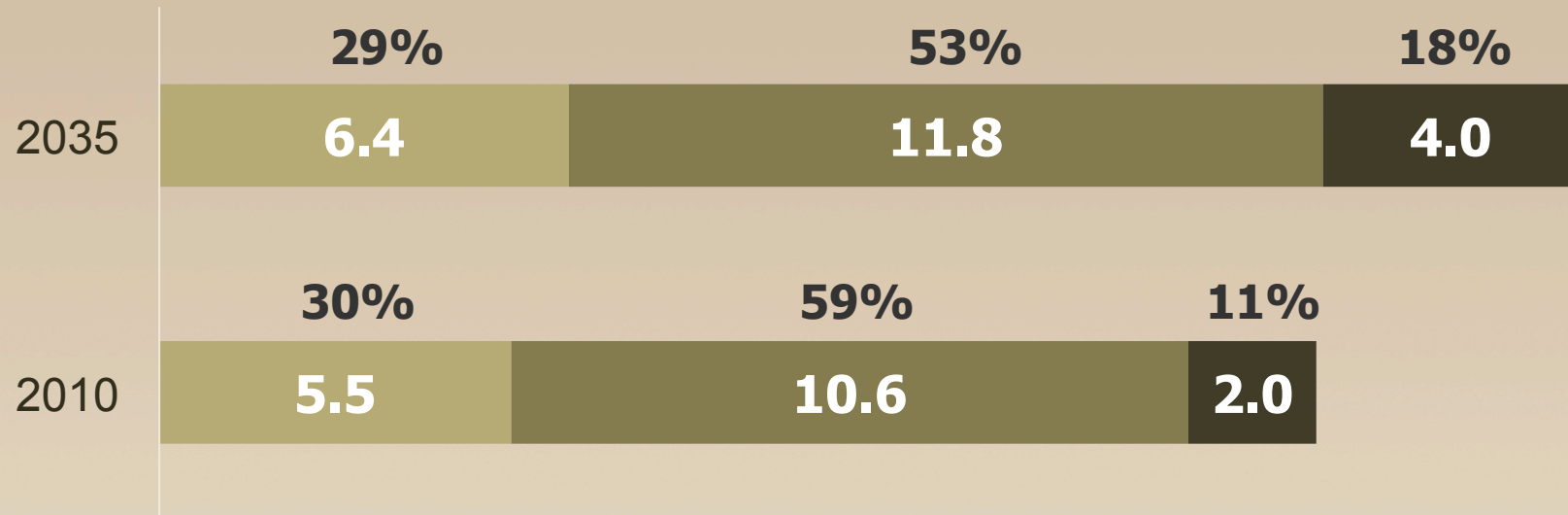
Source: State of California, Department of Finance, County Population Estimates and Components of Change by Year

Population Shifts by Age Cohort

Population by Age Group (in millions)

■ 0-20   ■ 21-64   ■ 65+

2035

29%	53%	18%
6.4	11.8	4.0

2010

30%	59%	11%
5.5	10.6	2.0

Note: Percentages do not add to 100% due to rounding
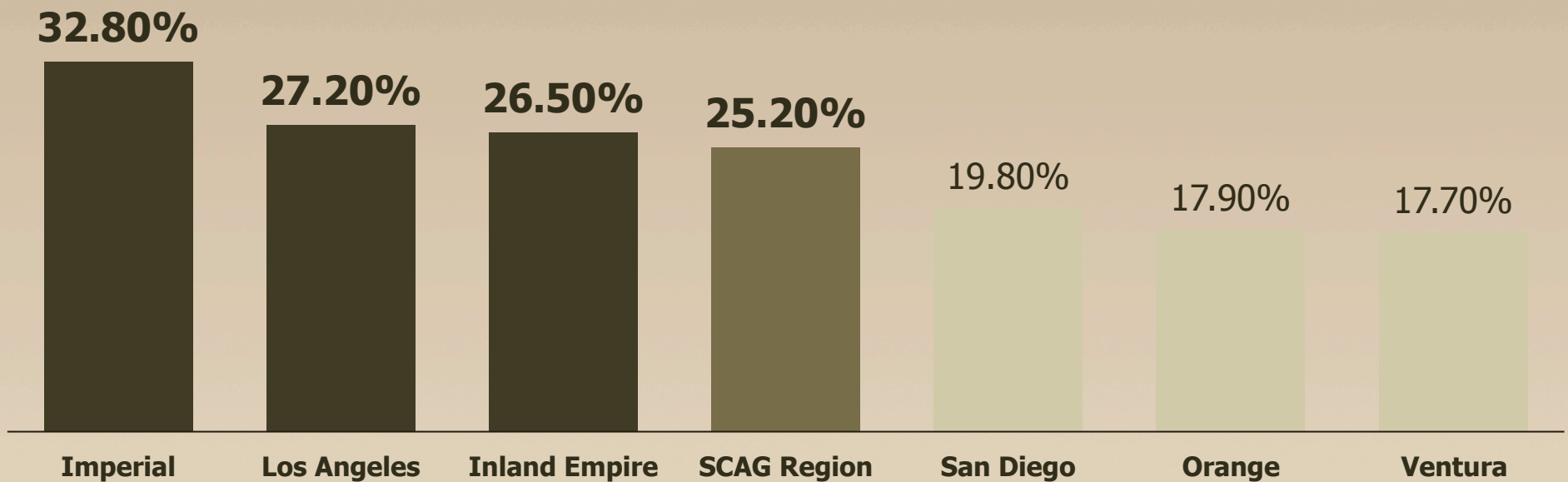*Source:* US Census Bureau, SCAG

Implications of Changing Demographics

- Increased demand for **housing choices** in central cities and mixed communities with shopping, health services, church and transportation options
- **Surplus of large-lot homes** and increased demand for small lot homes
- Increased **demand for health care and social services**
- Downward pressure on **tax revenues**
- Changing **transportation preferences**

Much of Our Future Workforce is Living in Poverty

Share of Children Under 18 Living in Poverty for California Areas, 2012

Imperial	Los Angeles	Inland Empire	SCAG Region	San Diego	Orange	Ventura
32.80%	27.20%	26.50%	25.20%	19.80%	17.90%	17.70%

Source: U.S. Census Bureau, American Community Survey, 2012

Median Household Income

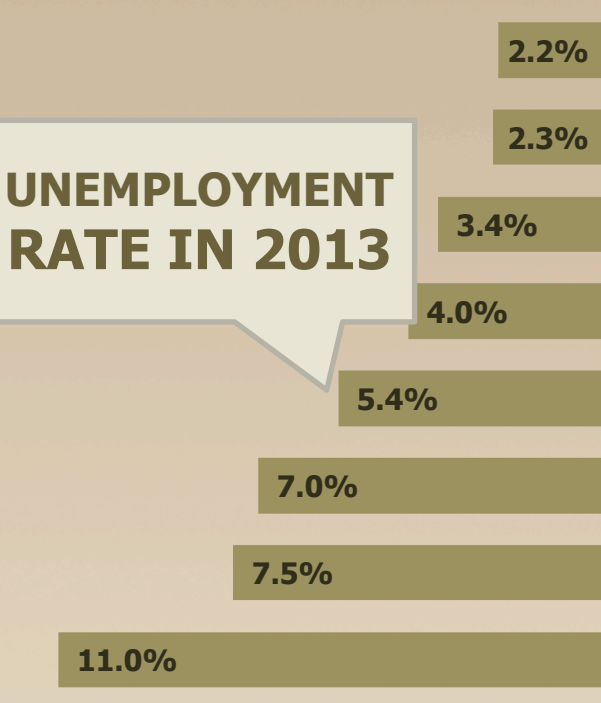# California Education Levels
Bachelor's Degree or Higher

43.5%
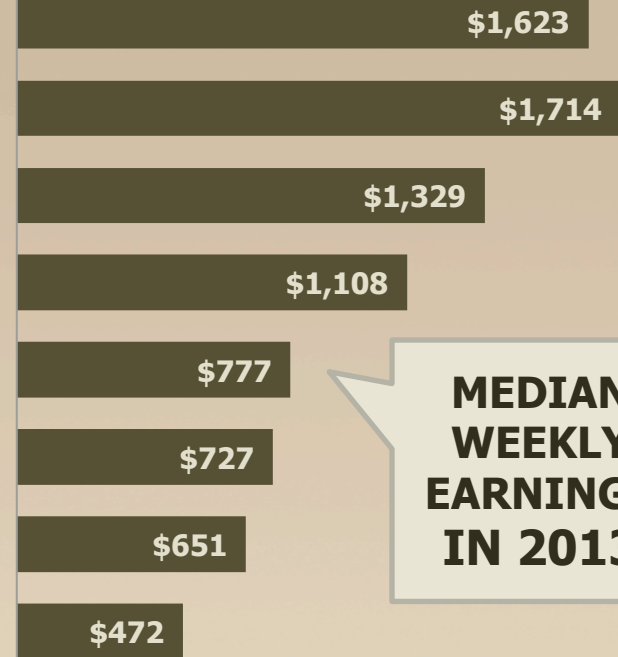
29.0%

From Poverty to Prosperity:
Increasing Pathways to Jobs & Opportunity

UNEMPLOYMENT RATE IN 2013

	Unemployment Rate	Degree	Median Weekly Earnings
	2.2%	DOCTOR'S DEGREE	$1,623
	2.3%	PROFESSIONAL DEGREE	$1,714
	3.4%	MASTER'S DEGREE	$1,329
	4.0%	BACHELOR'S DEGREE	$1,108
	5.4%	ASSOCIATE'S DEGREE	$777
	7.0%	SOME COLLEGE, NO DEGREE	$727
	7.5%	HIGH SCHOOL DIPLOMA	$651
	11.0%	LESS THAN A HIGH SCHOOL DIPLOMA	$472

MEDIAN WEEKLY EARNINGS IN 2013

ALL WORKERS: 6.1%

ALL WORKERS: $827

2012-2035 RTP/SCS
A Job Creation Engine

In April 2012, SCAG unanimously adopted the its first RTP that includes a Sustainable Communities Strategy that:

- Invests nearly $525 billion over the next 25 years to upgrade the region's transportation system

- Was developed through a bottoms-up local input process with unprecedented public outreach and stakeholder involvement

- Reduces per capita GHG emissions 9% by 2020 and16% by 2035

REGIONAL TRANSPORTATION PLAN
2012–2035 RTP
SUSTAINABLE COMMUNITIES STRATEGY
Towards a Sustainable Future

2016 RTP/SCS: Policy Challenges, Opportunities & Emerging Trends
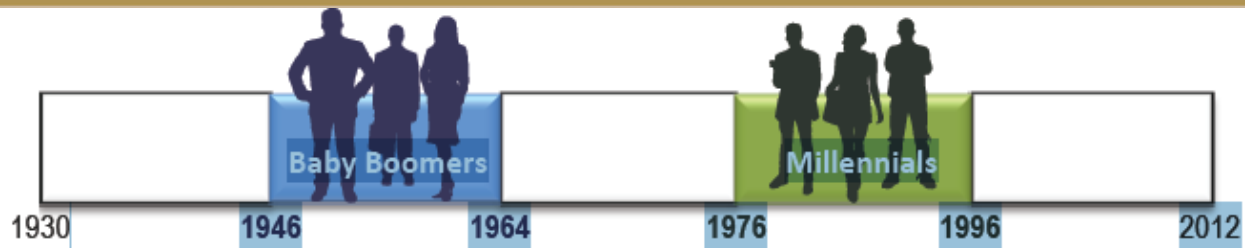
2016 RTP/SCS Emerging Trends & Opportunities
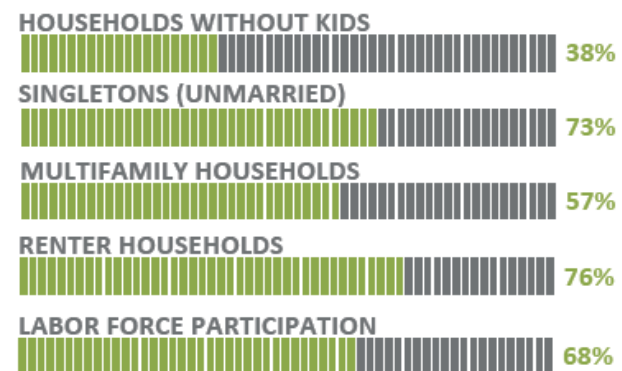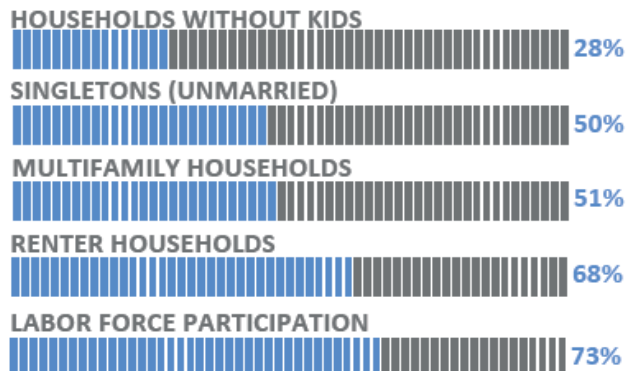## What About the Millennials?

- Rapid adoption of new communication technologies
- Travel fewer miles and make fewer trips
- Less interested in car and house ownership
- Rapidly adopting to the "shared" economy
- Favor towards low-travel urban lifestyles with emphasis on walking, cycling, ride-sharing and transit

Millennials Compared to Baby Boomers

1930   1946   Baby Boomers   1964   1976   Millennials   1996   2012

HOME AND WORK LIFE

	Baby Boomers	Millennials
HOUSEHOLDS WITHOUT KIDS	28%	38%
SINGLETONS (UNMARRIED)	50%	73%
MULTIFAMILY HOUSEHOLDS	51%	57%
RENTER HOUSEHOLDS	68%	76%
LABOR FORCE PARTICIPATION	73%	68%
AVERAGE INCOME	$25,428	$19,925
UNEMPLOYMENT	5%	10%

Changing Attitudes

"Either/Or"
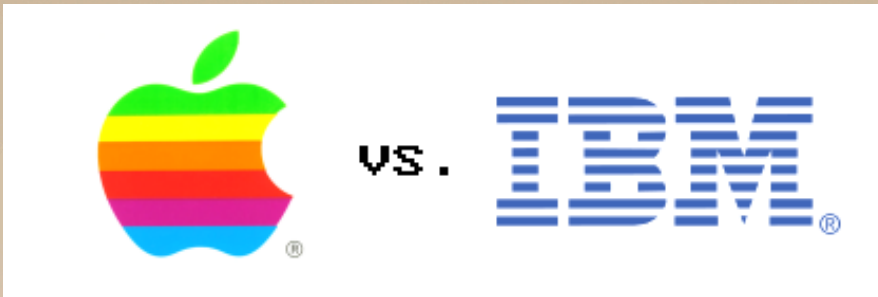
- Boomer's and Gen X grew up with big corporations battling over competing products for market dominance.

Open Source

- Millennials have experienced an open source world where products are available on many platforms, and the battle is for growing market share.

Changing Attitudes to Lifestyle Choices... then.

Changing Attitudes to Lifestyle Choices... now.

Changing Attitudes to Transportation Choices...then.

Changing Attitudes to Transportation Choices...then.

Changing Attitudes to Transportation Choices…then.
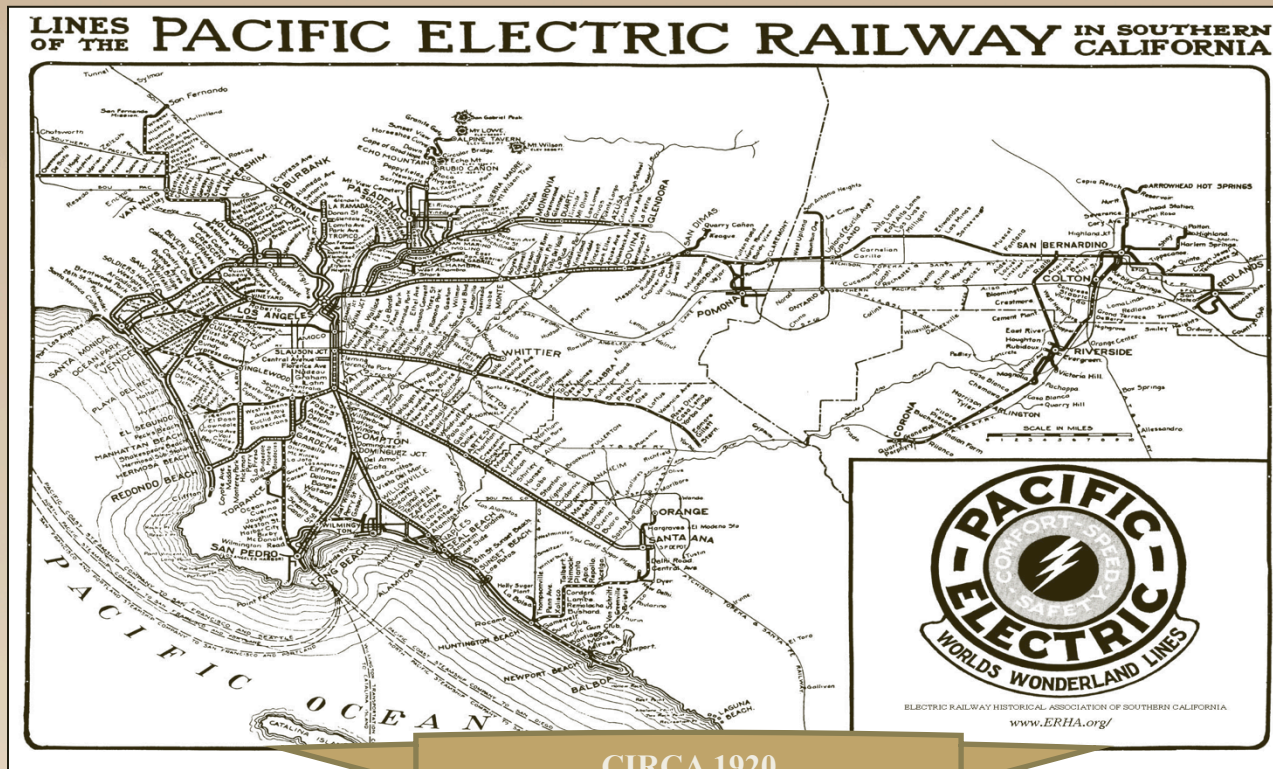
Changing Attitudes to Transportation Choices...now.
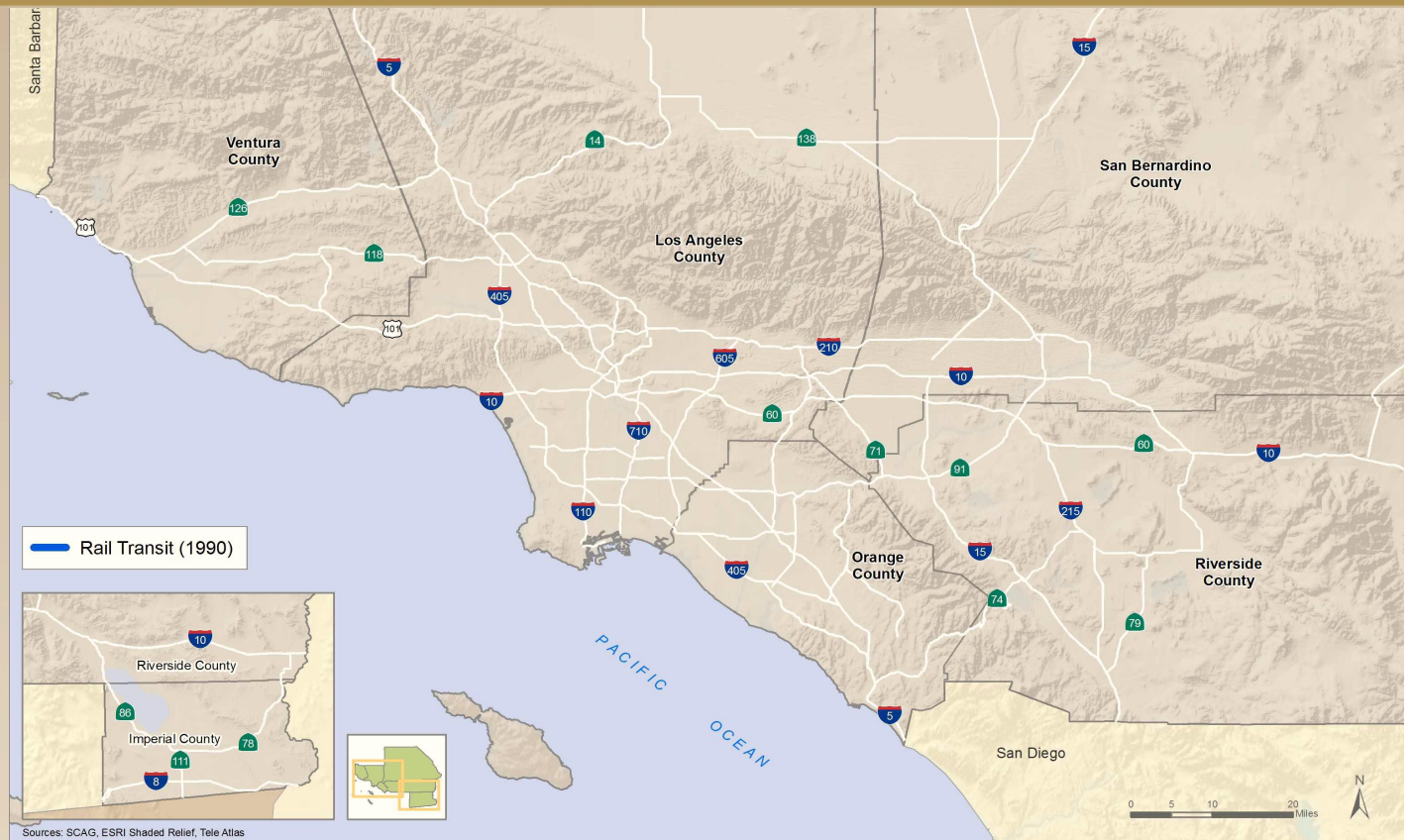
Changing Attitudes to Transportation Choices...now.

2016 RTP/SCS: Policy Challenges, Opportunities & Emerging Trends

CIRCA 1920

Passenger Rail in Southern California

Passenger Rail in Southern California

Light & Heavy Rail Extensions

Image courtesy Metro © 2012 LACMTA

2035

Bus Rapid Transit Expansion THROUGHOUT THE REGION

Metrolink/ LOSSAN Upgrades and California High-Speed Rail Phase 1

Santa Barbara

Ventura County

Los Angeles County

Orange County

Riverside County

San Diego

PACIFIC OCEAN

Urban Rail
— Existing (2008)
— Plan (2035)

Rapid Bus
— Existing (2008)
— Plan (2035)

Metrolink
— Existing (2008)
— Plan (2035)

Bus Routes
— Existing and Plan (2035)

Riverside County
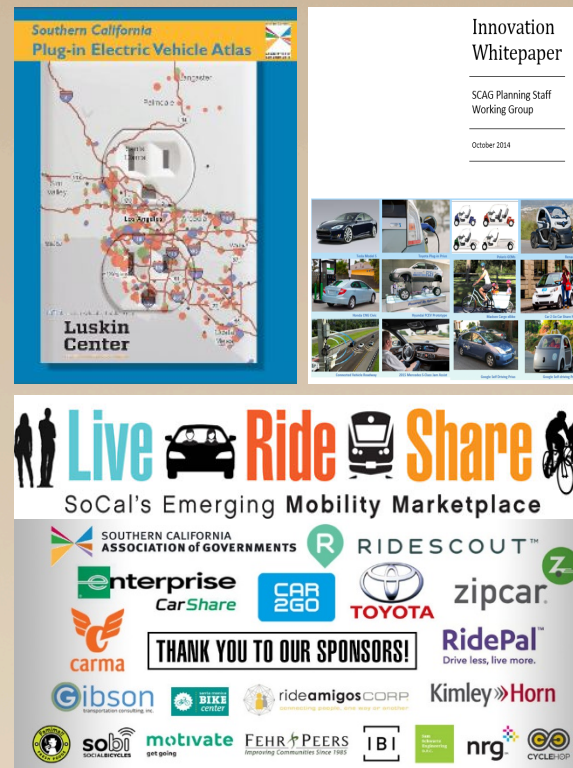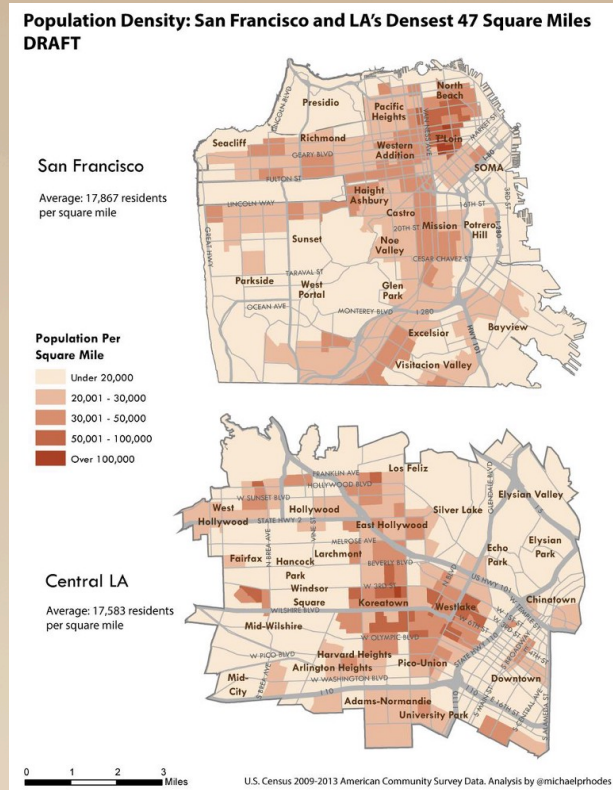
Imperial County

0 5 10 20 Miles

N

Understanding New Mobility

- Researching data collection & modeling practices in key areas:
  - Alt Fuel Vehicles
  - New Mobility Services
  - Short Trip Replacement
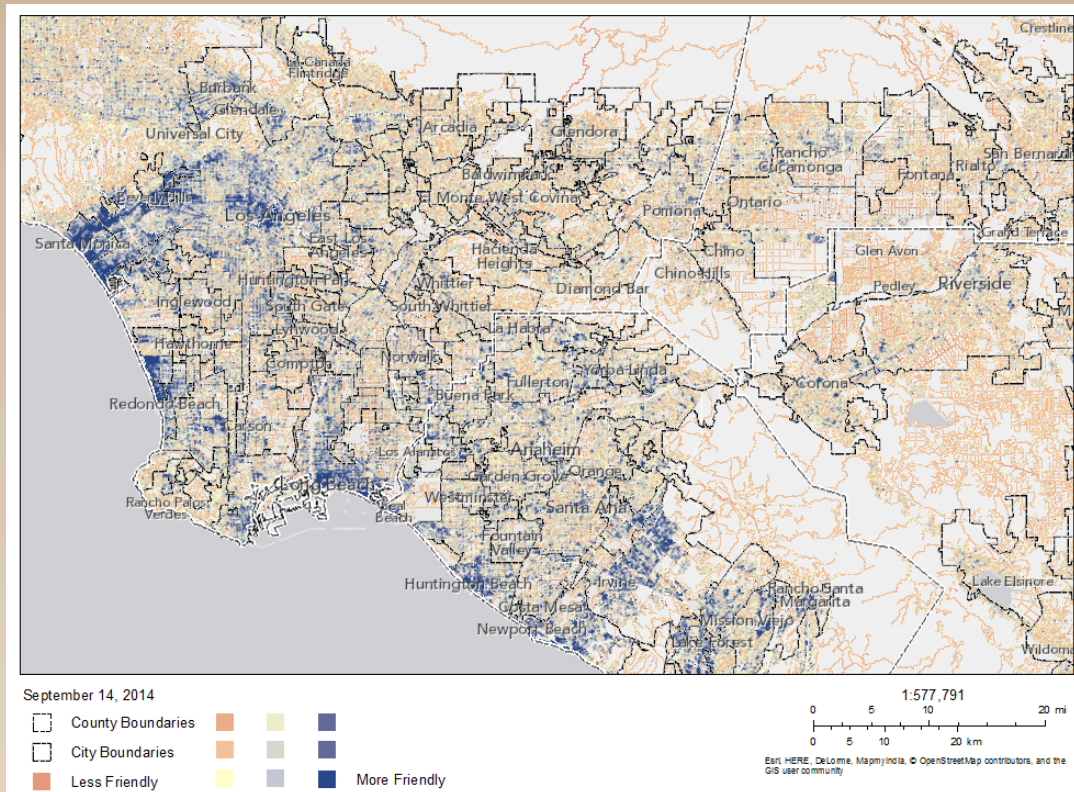 - Bus Transit Livable Corridors

Understanding New Mobility

- Many areas of SCAG region have the levels of density that support higher transit use
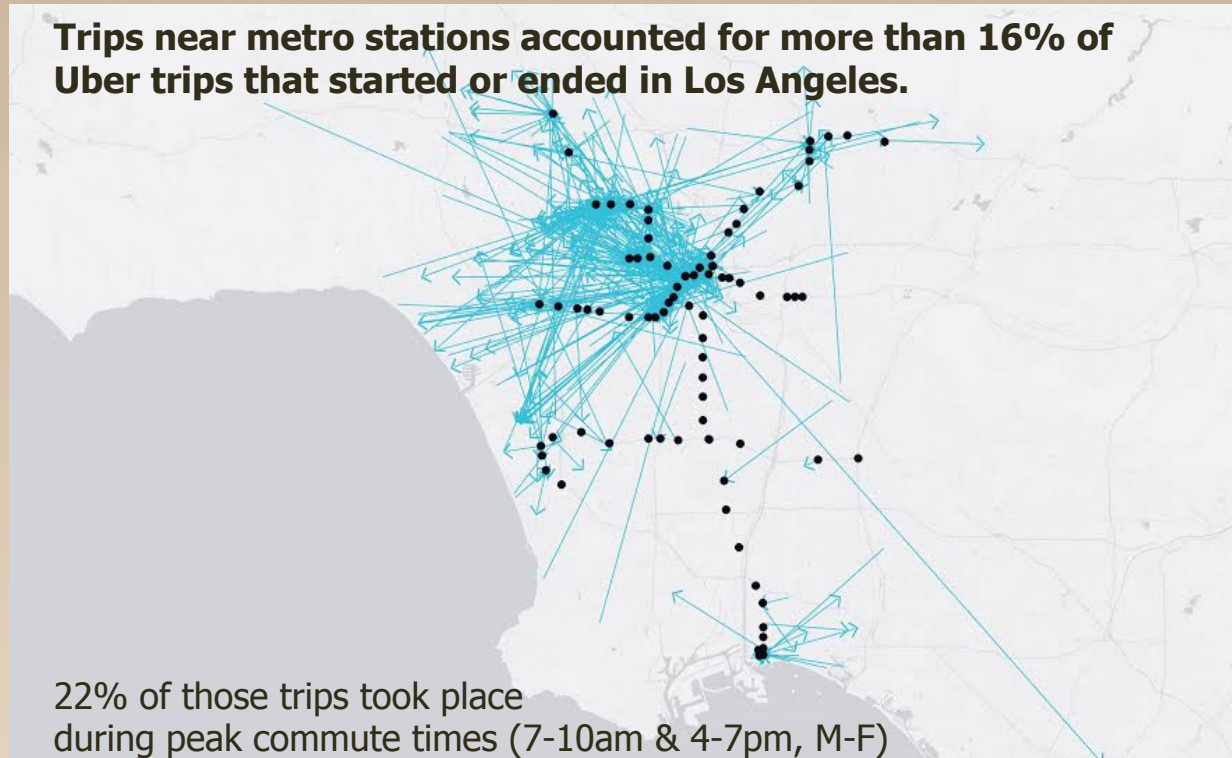

Population Density: San Francisco and LA's Densest 47 Square Miles
DRAFT

San Francisco

Average: 17,867 residents per square mile

Population Per Square Mile
- Under 20,000
- 20,001 - 30,000
- 30,001 - 50,000
- 50,001 - 100,000
- Over 100,000

Central LA

Average: 17,583 residents per square mile

U.S. Census 2009-2013 American Community Survey Data. Analysis by @michaelprhodes

Understanding New Mobility

September 14, 2014

County Boundaries
City Boundaries
Less Friendly
More Friendly

1:577,791

0   5   10   20 mi
0   5   10   20 km

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Understanding New Mobility

Trips near metro stations accounted for more than 16% of Uber trips that started or ended in Los Angeles.

22% of those trips took place
during peak commute times (7-10am & 4-7pm, M-F)

Understanding New Mobility

2016 RTP/SCS Emerging Trends & Opportunities Transportation Technologies

- Neighborhood Electric Vehicles (NEVs)
- Urban Mobility Platforms
- eBikes
- Car/Bike Sharing
- Travel Planning Apps

- Connected Vehicle Technologies
- Semi-automated drive modes
- Adaptive Cruise Control
- Lane centering
- Fully Autonomous Vehicles

2016 RTP/SCS: Complete Streets Strategies

The Award Winning Ocean Park Boulevard project demonstrates how streetscape improvements can reconnect a neighborhood divided by a major auto-oriented street to become a sustainable complete street.
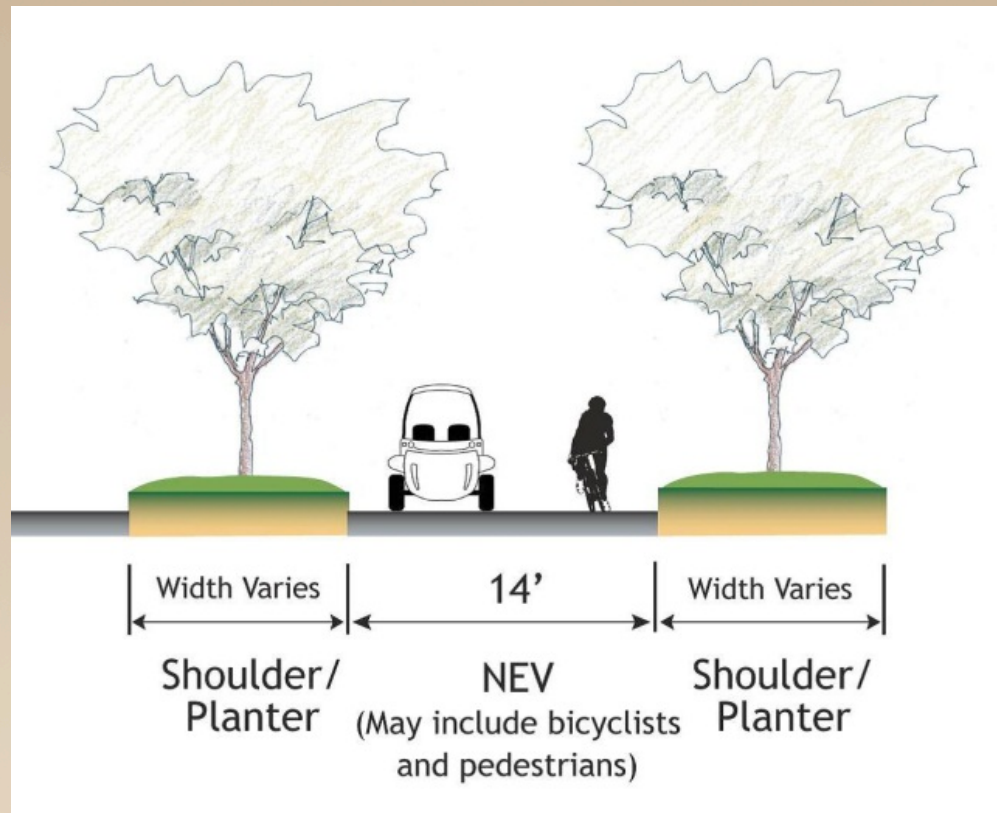
2016 RTP/SCS: Active Transportation

- **$200 M** awarded for first 3 years of Active Transportation Program (ATP)

- More than **100 CITIES** in the SCAG Region applied for ATP funds

- SCAG Regional Safety & Encouragement Campaign **$2.3 M** to improve safety & encourage biking/walking

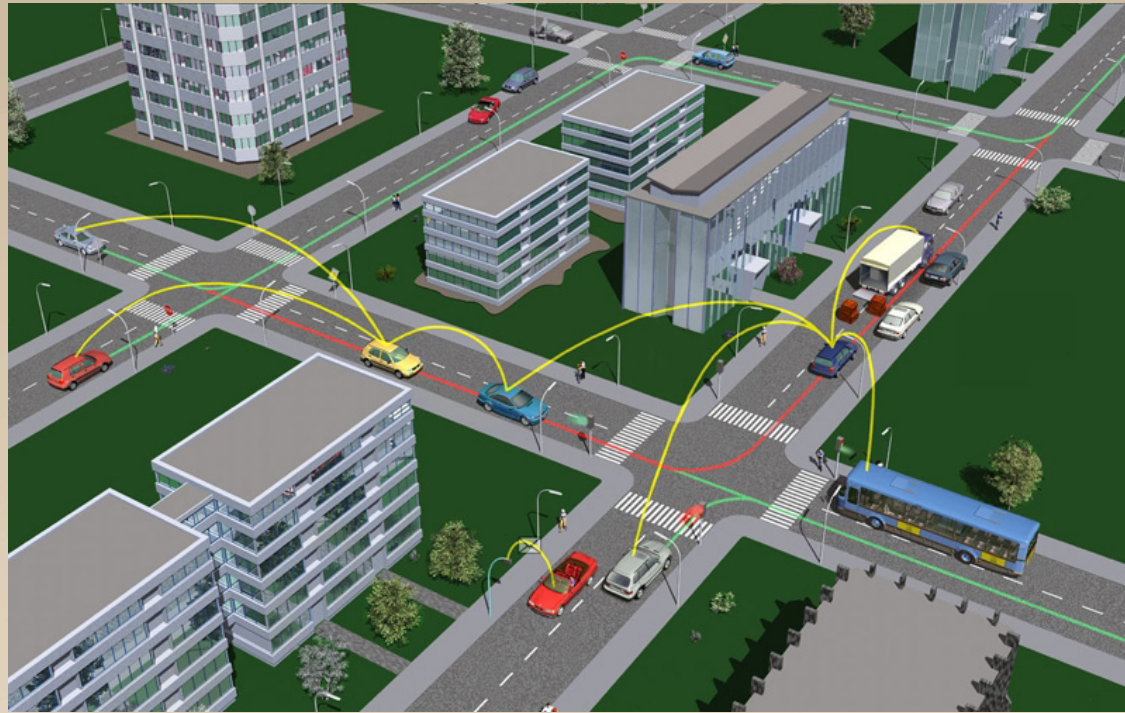# 2016 RTP/SCS: Neighborhood Electric Vehicles & Low Speed Lanes

2016 RTP/SCS: Transportation Network Companies & Car Sharing

2016 RTP/SCS: Travel Planning Applications & Connected Vehicle Technology

2016 RTP/SCS: Alternative Fuel Vehicles & Charging Infrastructure

- Plug-in Electric Vehicles (PEVs)
  - Battery Electric
  - Plug-in Hybrids
- Natural Gas
- Hydrogen Fuel Cell Vehicles

2016 RTP/SCS: Automated and Semi-Automated Vehicles

Semi-automated drive modes already on the road:
- Self parking
- Adaptive Cruise Control
- Lane centering
- Stop-and-go driving capability

The Future...

The Future…

DISCUSSION

For more information visit **www.scag.ca.gov**